

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

ULTRAVISION TECHNOLOGIES, LLC,
Plaintiff,

v.

HOLOPHANE EUROPE LIMITED, ACUITY
BRANDS LIGHTING DE MEXICO DE RL
DE CV, HOLOPHANE S.A. DE C.V., AND
ARIZONA (TIANJIN) ELECTRONICS
PRODUC TRADE COMPANY, LTD.

Defendant.

Case No. 2:19-cv-00291-JRG-RSP
(LEAD CASE)

JURY TRIAL DEMANDED

ULTRAVISION TECHNOLOGIES, LLC,
Plaintiff,

v.

YAHAM OPTOELECTRONICS CO., LTD.

Defendant.

Case No 2:19-cv-00398-JRG-RSP
(CONSOLIDATED CASE)

JURY TRIAL DEMANDED

ULTRAVISION TECHNOLOGIES, LLC,
Plaintiff,

v.

SAMSUNG ELECTRONICS CO., LTD.,

Defendant.

Case No. 2:19-cv-00252-JRG-RSP

JURY TRIAL DEMANDED

**PLAINTIFF ULTRAVISION TECHNOLOGIES, LLC'S
REPLY CLAIM CONSTRUCTION BRIEF**

TABLE OF CONTENTS

	<u>Page(s)</u>
A. [each of the plurality of optical elements comprises] A First Lens Element and a Second Lens Element Disposed Over the First Lens Element.....	1
B. Uniformity Terms.....	2
C. Substantially Transparent.....	3
D. Substantially the Entire Display Surface.....	4
E. Substantially No Illumination	5
F. Minimal/Minimum Illumination	6
G. Heat Sink	7
H. Preambles	7
I. Display Surface	7
J. Area Terms	9
K. Predetermined Bounded Area	9
L. Desired Uniformity Ratio	10
CONCLUSION.....	10

TABLE OF AUTHORITIES

	Page(s)
Cases	
<i>Arctic Cat Inc. v. GEP Power Products, Inc.</i> , 919 F.3d 1320 (Fed. Cir. 2019).....	7
<i>Cont’l Circuits LLC v. Intel Corp.</i> , 915 F.3d 788 (Fed. Cir. 2019).....	8
<i>Crane Co. v. Sandenvendo Am., Inc.</i> , No. 2:07-CV-42-CE, 2009 WL 1586704 (E.D. Tex. June 5, 2009)	6
<i>Interval Licensing LLC v. AOL, Inc.</i> , 766 F.3d 1364 (Fed. Cir. 2014).....	4, 5
<i>Max Blu Techs. v. Cinedigm Corp.</i> , No. 2:15-cv-1369-JRG, 2016 WL 3688801 (E.D. Tex. July 12, 2016).....	3
<i>Orthokinetics, Inc. v. Safety Travel Chairs, Inc.</i> , 806 F.2d 1565 (Fed. Cir. 1986).....	6
<i>Phillips v. AWH Corp.</i> , 415 F.3d 1303 (Fed. Cir. 2005).....	2
<i>Pitney Bowes, Inc. v. Hewlett-Packard Co.</i> , 182 F.3d 1298 (Fed. Cir. 1999).....	7
<i>Saint Lawrence Comm’cns v. Apple Inc.</i> , No. 2:16-CV-82-JRG, 2017 WL 2874526 (E.D. Tex. July 5, 2017).....	6
<i>Theta IP LLC v. Samsung Elecs. Co.</i> , No. 2:16-cv-527-JRG-RSP, 2017 WL 2444715 (E.D. Tex. June 6, 2017)	4

Defendants' responsive brief reveals two fundamental errors of claim construction:

(1) the claims should be limited to a disclosed application (e.g., billboards) even if the invention is not described as suitable only for that application; and (2) a POSITA is unable to understand the metes and bounds of any claim that uses the adverb "substantially" to modify characteristics of the claimed invention regardless of the knowledge and information available to the POSITA. Defendants' attempt to improperly limit or invalidate the claims by repeatedly applying these erroneous principles should be rejected.¹

A. [each of the plurality of optical elements comprises] A First Lens Element and a Second Lens Element Disposed Over the First Lens Element

Ignoring the plain meaning of the claims, Defendants argue that an optical element that comprises a first lens element and second lens element requires two separate and distinct lenses based on embodiments in the specification, ignoring that the specification plainly teaches a substrate with more than one lens structure on a single lens. Figure 5D shows the detail of the lens structure 522, which includes "an interior surface 524 and an exterior surface 526 that shapes and directs the light in the correct pattern." Ex. 1, at 5:43-46.

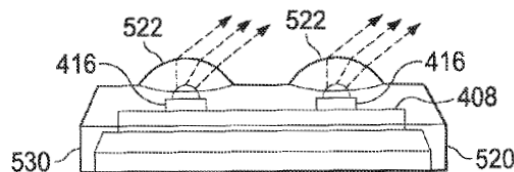
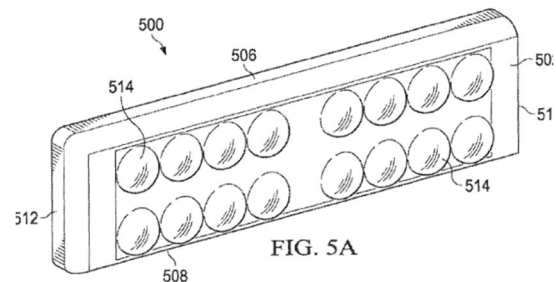


FIG. 5C

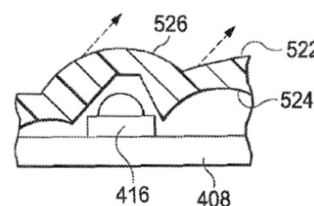


FIG. 5D

¹ It is unclear why Defendants changed the ordering of the claim terms from those presented in the opening claim construction brief. For ease of reference for the Court, Plaintiff has organized this brief to track the order in Defendants' Responsive Brief ("Br.").

Defendants argue that because the specification uses the phrase “lens element” only with respect to the embodiments shown in Figures 8A-J, that the claims using the term “lens element” should be limited to the disclosures of those embodiments.² But the claim language itself defines the properties and structure of each “optical element.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005). Here, as in *Lamar*, there is no reason to construe this term. Defendants’ proposal to limit the claims to two distinct lenses when what is plainly claimed is two elements of lenses would read the word “element” out of the claims and should be rejected.

B. Uniformity Terms

Undeterred by the Court’s prior preliminary construction, Defendants now argue that this term is indefinite because there are “two conflicting descriptions to explain uniform or even illumination” based on their expert’s opinion that a 3:1 ratio of the average illumination to the minimum would cause “noticeable” hot spots and dead spots. Br. at 5. The specification contains no conflict; rather, Defendants’ expert attempts to manufacture a conflict to create an indefiniteness argument where none exists. Defendants cite to no cases in which a patent claim was invalidated because a paid expert professed to disagree with a disclosure in a specification.

The patents teach the person of ordinary skill that the “uniformity” terms are not defined in the context of a formula or ratio. The 3:1 ratio relied upon by Defendants is not the “definition” of even illumination, as it appears in dependent claims as an additional limitation related to the uniformity ratio. *See, e.g.*, Ex. 1, claim 5 (“wherein the uniformity ratio is 3:1”); *see also* claims 14, 21. As the Court previously recognized, the patents describe uniformity as the relative absence of hot spots or dark spots. And as the dependent claims show, a 3:1 ratio of

² Defendants are also incorrect to imply that the lenses shown in Figures 8A-J are “multiple, discrete lenses,” (Br. at 3), when in fact they are singular lenses with more complicated shapes.

average illumination to minimum illumination is one example of a measurement that would fall within that understanding. The “descriptions” relied upon by Defendants are not in tension.³

Defendants also try, but fail, to distinguish *Max Blu Techs. v. Cinedigm Corp.*, No. 2:15-cv-1369-JRG, 2016 WL 3688801 (E.D. Tex. July 12, 2016). In that case, as here, there was no mathematical description in the specification as to what constituted a “substantially flat and coplanar” surface. That patent described that in an embodiment, the surfaces are “level and extend to the same height relative to the opposite surface of disk ‘to the precision of the flatness of the master disk substrate.’” *Id.* at *28. And the court in that case recognized that the degree to which the tops are level and coplanar “is defined by the described purpose of the level and coplanar limitations—for use in flying head applications.” *Id.* “Thus, the tops of the lands are substantially flat and coplanar if the degrees of flatness and coplanarity are suitable for flying head applications.” *Id.* Here, the degree of uniformity would be understood by the person of ordinary skill in the art as the absence of bright spots or dead spots. Ex. 8, ¶¶ 45-49.

The Court has previously recognized that the person of ordinary skill in the art would be able to understand whether an observer would perceive hot spots and dead spots, and Defendants’ attempt to shoe-horn a lexicography argument in order to show “inconsistent” definitions should be rejected.⁴

C. Substantially Transparent

Defendants’ insistence that the transparency must be defined by a specific numerical

³ Defendants also note that the presence of “a single absurdly bright, but small hot spot” would still satisfy the 3:1 ratio fails because the person of ordinary skill in the art, as well as the ordinary observer, would understand that an absurdly bright hot spot would not meet the uniform illumination term as properly construed. (Br. at 6.)

⁴ Defendants’ statement that the 3:1 ratio would just be turning the lights down to 1/3 the brightness is also an oversimplification of the measurement. (Br. at 5.)

factor must be rejected. The use of the term “substantially” here merely recognizes the engineering realities that there is no such thing as perfect transparency. *Interval Licensing LLC v. AOL, Inc.*, 766 F.3d 1364, 1370 (Fed. Cir. 2014) (“We do not understand the Supreme Court to have implied in *Nautilus* . . . that terms of degree are inherently indefinite.”). The extrinsic evidence, replete with similar types of language such as limiting “appreciable” scattering, all reflect this truism. Defendants also misrepresent the case law, implying that the court in *Theta IP LLC v. Samsung Elecs. Co.*, No. 2:16-cv-527-JRG-RSP, 2017 WL 2444715, at *14 (E.D. Tex. June 6, 2017) held claims indefinite for claiming “substantially the desired signal.” But that case held nothing of the sort, construing the term and not finding it indefinite. *Id.* at *15. Here, the Court should do the same and construe this term according to its plain and ordinary meaning.

D. Substantially the Entire Display Surface

Here, as with “substantially” transparent, the claim uses the phrase “substantially” in recognition of the real-world engineering problems encountered in optics. Defendants attempt to argue away the fact that their own expert admitted that he could understand whether “substantially the entire display surface” of a road sign in a grainy photograph was lit. The question posed to Dr. Josefowicz was not avoiding the “zone of uncertainty,” as claimed by defendants, because it specifically asked whether “substantially” the entire display surface was lit. Rather than testify that he couldn’t answer, he just testified that all of the borders of the sign were being lit and therefore answered in the affirmative. Ex. 18, Josefowicz Dep. 165:19-169:15. This admission ends the inquiry.

Defendants argue that because there are no published industry standards regarding imperfections in illumination, that this term must be indefinite. But here, as above, this ignores that absolute precision in patent claiming is impossible, and that a POSITA would understand that the “spot illumination” claimed in the prior art is different from the concept claimed here,

where each LED provides an overlapping field of light so that each LED illuminates substantially the entire display surface.

E. Substantially No Illumination

Defendants again re-hash already rejected arguments that this term is indefinite, arguing that light trespass and light pollution are subjective and ignoring extrinsic evidence and expert testimony that the person of ordinary skill in the art would understand the meaning of this term. The different types of light trespass and light pollution are known, as are the limits of what is considered acceptable. Ex. 8, Coleman Decl., ¶¶ 56-58. Defendants, who argue in several terms that claim limitations are indefinite for failing to refer specifically to a standard, now state that the known IES guidelines for light trespass and light pollution are still not enough. The use of the term “substantially,” as above, does not render this claim indefinite. *Cf. Interval Licensing LLC*, 766 F.3d at 1371 (“we do not hold today[] that terms of degree are inherently indefinite.”). Here, the specification makes clear that “substantially no illumination” refers to substantially no wasted light. “[L]ight that does not strike the surface 102 is wasted and may create problems (e.g., light pollution), as well as waste illumination that could be used for the surface 102.” Ex. 1, 2:61-64. “In one embodiment . . . areas beyond the edges . . . would receive no illumination at all or at least a minimal amount of illumination from the LED 416.” *Id.* at 5:9-14. “Substantially” simply recognizes the engineering realities that there can never be zero spill light. Otherwise, a single photon imperceptibly spilling over the display surface could lead to non-infringement. Contrary to Defendants’ assertion, the determination of infringement regarding this term does not depend on the “state of mind” of the accused infringer. Br. at 16. And, as stated by Ultravision’s expert, the person of ordinary skill in the art would understand the conditions under which light trespass would be problematic. Ex. 8, ¶¶ 57-64.

F. Minimal/Minimum Illumination

These terms are definite and the Court's prior preliminary construction should be reversed based on at least the new evidence submitted by Ultravision that provides an objective standard for measuring allowable illumination spillage. First, the record before the Court previously contained no reference to an objective standard for measuring light pollution. Second, the construction in the previous case focused on claims limited to billboard lighting, and only light pollution (e.g., upward light) was at issue. Here, the additional extrinsic evidence in the record supports a finding that where the claims refer to minimal illumination, a POSITA would understand that the fixture complies with the IES light trespass guidelines.

That the light trespass guidelines vary based on location does not render the claim indefinite if the person of ordinary skill in the art would understand implementation-specific details. *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 806 F.2d 1565, 1576 (Fed. Cir. 1986); *Saint Lawrence Comm'cns v. Apple Inc.*, No. 2:16-CV-82-JRG, 2017 WL 2874526, at *11 (E.D. Tex. July 5, 2017) (holding no indefiniteness because relative bandwidths and the precise manner of filtering are implementation-specific details). In *Crane Co. v. Sandenvendo Am., Inc.*, No. 2:07-CV-42-CE, 2009 WL 1586704, at *12 (E.D. Tex. June 5, 2009), a similar argument was rejected. Defendants argued that the phrase "severe impact forces" was indefinite in a patent directed to alleviating problems related to shaken soda cans in vending machines, because differences in geography and atmospheric pressure would result in different levels of effervescence based on the amount of force applied. The court recognized that in light of the specification and the object of invention, defining the impact forces at such a magnitude to cause immediate effervescence would have been understood by a POSITA, rendering the claim definite. *Id.* Here, as in *Crane Co.*, the specification describes the problem to be solved—the minimization of light trespass—and a POSITA would have understood an objective measure by

which that can be determined.

G. Heat Sink

Defendants create an “inherent ambiguity” in the term where one does not exist in order to shoehorn a non-infringement position into the claims.⁵ In an effort to add “context” to the dispute, Defendants cite to embodiments from the specification while ignoring the language of the claims themselves. The claims require that the optics panel is configured to be attached to the heat sink comprising a power supply enclosure disposed on the heat sink. There is no ambiguity that the heat sink is attached to it an optics panel and a power supply enclosure. The optics panel and the power supply both generate heat, and the claim is silent as to the source of the heat dissipated by the heat sink. None of the terms in this phrase are terms of art or specific technical terms. Nor is there lexicography in the specification or a clear disclaimer. Defendants’ narrowing construction should be rejected in favor of the plain meaning.

H. Preambles

It is well settled law that statements of intended use in preambles are not structural limitations. *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305 (Fed. Cir. 1999). Here, while billboards are the application that the specification focuses on, the claims are not so limited. The claims here define “structurally complete” inventions. *Arctic Cat Inc. v. GEP Power Products, Inc.*, 919 F.3d 1320, 1329 (Fed. Cir. 2019). Here, the antecedent basis that the preambles provide is not part of the claimed invention, but rather statements of intended use.

I. Display Surface

Defendants’ most egregious attempt to limit the claims is present in this phrase, where

⁵ Ultravision disagrees with Defendants that anything identified as the “heat sink” in its infringement contentions cannot dissipate heat from the optics panel.

they attempt to limit the “display surface” to a sign only based upon non-lexicography examples found in the specification. This term does not require construction as the jury will readily be able to understand the meaning of a display surface and make findings of fact related to infringement thereof. Plaintiff’s plain meaning construction should be adopted.

The Federal Circuit has recently cautioned that, absent lexicography or the clear disavowal of claim scope, statements from the specification should not be read into the claims. *Cont’l Circuits LLC v. Intel Corp.*, 915 F.3d 788, 797 (Fed. Cir. 2019). There, the claims were found to have been improperly limited to a dielectric material that was “produced by a repeat desmear process.” *Id.* at 795. The specification taught that “one technique” for forming the teeth is the double desmear process, and that the description of “the present invention,” which appeared within the discussion of the preferred embodiment, related to the double desmear process. The double desmear process was not mentioned in every embodiment. *Id.* at 798.

Defendants also point to statements by Ultravision’s prior counsel during the previous claim construction hearing, allegedly distinguishing “parking lot lights” from the claimed invention. Br. at 25 (citing Ex. 7 at 44-45). But prior counsel’s argument in discussing the “minimum illumination” term was related to light pollution (upward light) only. Counsel was merely pointing out that in the context of that indefiniteness dispute, standards related to parking lot lights were not as probative as those related to billboard lights. Counsel did not make any admission that all claims of all Ultravision LED lighting patents are limited to billboard lights. The scope of the claims with respect to these terms was not at issue in that case as the accused Lamar products were all billboard lighting products. As this issue was not disputed before the Court previously, counsel’s statements should not bind Ultravision.

Here, as in *Cont’l Circuits*, summary statements of the invention in the specification

should not limit the claims as a whole. The patents contain references to embodiments that do not mention billboards. For example, the description of the embodiment in FIGS. 7A-7B and 8A-8J do not mention billboards at all. Ex. 1, 7:21-8:30. The plain meaning of the term “display surface” is a surface that is to be displayed, and to narrow the claims beyond that is error.

J. Area Terms

The terms “area,” “rectangular area,” and “rectangular region” speak for themselves, are not the subject of any lexicography or prosecution history disclaimer, and should be accorded their plain and ordinary meaning. Defendants attempt to usurp the issue of factfinding from the jury and have the Court construe these terms to import limitations where no such constructions are warranted. As with “display surface,” the jury is readily able to understand these terms.

Defendants first argue that the claimed lighting assembly for directing light towards an area is not an intended use, again by pointing to embodiments in the specification and noting that the specification references a “rectangular target area” that is the surface of a billboard. Br. at 26. But defendants again simply point to the preferred embodiment in the specification, which does not explicitly define the “area” terms as being billboards or portions of billboards. Nor do defendants point to any prosecution history showing a disclaimer or disavowal of claim scope. Therefore, Defendants’ proposed construction is erroneous.

K. Predetermined Bounded Area

Defendants’ argument that the “predetermined” bounded area must be an area with a physical border that exists absent lighting is a misapplication of claim construction principles. Defendants do not cite to a single shred of intrinsic or extrinsic evidence to support their position, because none exists. As a “predetermined bounded area” is readily understandable to a jury, the plain and ordinary meaning applies.

Ultravision is not arguing, as Defendants suggest, that the “predetermined bounded area”

is an amorphous blob. A lighting designer has the ability to select the area that he or she wishes to be lit evenly, and to select a fixture designed to light that area appropriately. That “area” does not need to have physical borders that exist independent of the emitted light.

Critically, the intrinsic evidence supports Ultravision’s position. The patents describe that “[o]ne or more lighting assemblies 110 may be coupled to the walkway 108 . . . to illuminate *some* or all of the surface 102 in low light conditions.” Ex. 1, 2:23-27 (emphasis added). Even in the preferred embodiment regarding billboard lighting, the patents contemplate that the “predetermined bounded area” is only a portion of the billboard, rather than the entire billboard. *Id.* As the patents support Ultravision’s construction, “predetermined bounded area” should not be limited to an area containing a physical border that can be seen absent the light from the claimed fixture.

L. Desired Uniformity Ratio

The dispute here is whether the “particular illumination profile” of claim 3 is expressed as a “desired uniformity ratio of average illumination to minimum illumination” as required by claim 4. Ex. 1. This claim, properly interpreted, does not require the measurement of anyone’s desires. Even if claim 4 is found to be indefinite, claim 5’s expression of the desired uniformity ratio as a numerical value would not be indefinite.

CONCLUSION

Defendants’ constructions, which require the Court to find that terms of degree create indefiniteness and embodiments should be read from the specification into the claims, should be rejected. For the reasons stated herein, Ultravision’s proposed constructions should be adopted.

Dated: August 11, 2020

Respectfully submitted

/s/ Alfred R. Fabricant

Alfred R. Fabricant

NY Bar No. 2219392

Email: ffabricant@fabricantllp.com
Peter Lambrianakos
NY Bar No. 2894392
Email: plambrianakos@fabricantllp.com
Vincent J. Rubino, III
NY Bar No. 4557435
Email: vrubino@fabricantllp.com
Joseph M. Mercadante
NY Bar No. 4784930
Email: jmercadante@fabricantllp.com
Daniel J. Shea
NY Bar No. 5430558
Email: dshea@fabricantllp.com
FABRICANT LLP
230 Park Avenue, 3rd Floor W.
New York, New York 10169
Telephone: (212) 257-5797
Facsimile: (212) 257-5796

Samuel F. Baxter
State Bar No. 01938000
Email: sbaxter@mckoolsmith.com
Jennifer L. Truelove
State Bar No. 24012906
Email: jtruelove@mckoolsmith.com
MCKOOL SMITH, P.C.
104 E. Houston Street, Suite 300
Marshall, Texas 75670
Telephone: (903) 923-9000
Facsimile: (903) 923-9099

**ATTORNEYS FOR PLAINTIFF
ULTRAVISION TECHNOLOGIES,
LLC**

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on August 11, 2020, a true and correct copy of the above and foregoing document has been served on counsel of record via the Court's CM/ECF system per Local Rule CV-5(a)(3).

/s/ Alfred R. Fabricant
Alfred R. Fabricant